LYNCHBURG CITY COUNCIL Agenda Item Summary

MEETING DATE: **February 11, 2003** AGENDA ITEM NO.: 3

CONSENT: X REGULAR: CLOSED SESSION: (Confidential)

ACTION: X INFORMATION:

ITEM TITLE: Pedlar Reservoir Hydrographic (Bottom) Survey and Safe Yield Analysis

<u>RECOMMENDATION:</u> Approve the attached resolution authorizing the City Manager to execute the consulting services contract for the referenced project and authorize the realignment of remaining funds from an existing Water Capital Fund project.

<u>SUMMARY:</u> The Pedlar Reservoir is the City's primary drinking water supply. The records indicate that the volume of the 125-acre Pedlar Reservoir, constructed in 1907, is 1.2 billion gallons, however the actual volume is unknown. No hydrographic surveys have been done, but it has been observed that silt is building up at the upper end of the reservoir and at the base of the dam. Previous studies using 1.2 billion gallons of storage indicate that the safe yield of drinking water during drought conditions is approximately 7 million gallons per day. A hydrographic survey is needed to determine the actual volume and the rate at which the volume is being reduced due to siltation. This survey will enable an accurate analysis of the actual safe yield. Additionally, this information would be useful in considering a future course of action, such as whether to remove the sediment or raise the dam.

One consideration, which should be kept in mind in scheduling this work, is that the survey will provide the best results if it completed during the winter or early spring when the reservoir is full to the spillway elevation, the leaves are off the trees and aquatic vegetation is minimal.

Ocean Surveys, Inc., a specialty contractor, has been selected through the RFP process to provide these services. The firm has performed hydrographic surveys of 70 reservoirs in 15 states.

PRIOR ACTION(S) February 4, 2003 - Physical Development Committee

FISCAL IMPACT: The cost of the Hydrographic Survey and Safe Yield Analysis is \$33,350.

Funding is available through the realignment of prior appropriations from the Water System Master Plan

Previous Previous Remaining Funds Funds Requested

Appropriations Expenditures

\$324,000 \$243,321 \$80,679 \$33,350

CONTACT(S): Stephen Bontrager, Dir. Of Utilities 847-1322 (Ext. 107)

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ATTACHMENT(S): Resolution

REVIEWED BY: Ikp

Resolution:
BE IT RESOLVED That the City Manager, L. Kimball Payne, III, is authorized to execute a contract with Ocean Surveys, Inc. to provide a hydrographic survey and safe yield analysis of the Pedlar Reservoir.
Adopted:
Certified: Clerk of Council
032L